=> file hcaplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 1.05 1.05

FILE 'HCAPLUS' ENTERED AT 15:09:46 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s RNA or ribonucleic or mRNA

345799 RNA

195230 RIBONUCLEIC

320645 MRNA

L1 629630 RNA OR RIBONUCLEIC OR MRNA

=> s kosmotrop? or lithium or sodium or cesium or potassium or rubidium

182 KOSMOTROP?

337508 LITHIUM

1174561 SODIUM

102833 CESIUM

665483 POTASSIUM

69540 RUBIDIUM

L2 1911722 KOSMOTROP? OR LITHIUM OR SODIUM OR CESIUM OR POTASSIUM OR RUBIDI

=> s solid support

1121818 SOLID

515905 SUPPORT

L3 9171 SOLID SUPPORT

(SOLID(W)SUPPORT)

=> s cellulose or nylon or polyester or polyethersulfone or polyolefin or polyvinylidene

364619 CELLULOSE

84579 NYLON

278196 POLYESTER

2408 POLYETHERSULFONE

76091 POLYOLEFIN

13215 POLYVINYLIDENE

L4 771205 CELLULOSE OR NYLON OR POLYESTER OR POLYETHERSULFONE OR POLYOLEFI
N OR POLYVINYLIDENE

=> s 11 and 12 and 13

L5 53 L1 AND L2 AND L3

 $\Rightarrow$  s 11 and 12 and 13 and 14

L6 7 L1 AND L2 AND L3 AND L4

=> file stnguide

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.69 3.74

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 15:09:54 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> d 16 1-7 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y) /N:v

- L6 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Anterior gradient 2 (AGR2)-interacting compounds or antibodies for prognosis, diagnosis and treatment of cancer and metastasis and drug screening
- AB Provided are methods and compds. relating to the diagnosis and treatment of metastatic cancer. Compds. which conjugate or interact with anterior gradient 2 (AGR2) and methods using the same are provided. The compds. are polyclonal, monoclonal, humanized, chimeric or antiidiotypic antibodies and fragments. The AGR2 cDNA-encoding protein and epitope fragments are useful as cancer vaccine or tumor marker for diagnosis and therapy of cancer and metastasis.
- AN 2004:308448 HCAPLUS <<LOGINID::20080303>>
- DN 140:337919
- TI Anterior gradient 2 (AGR2)-interacting compounds or antibodies for prognosis, diagnosis and treatment of cancer and metastasis and drug screening
- IN Rudland, Philip Spencer; Barraclough, Barry Roger; Liu, Dong; Sibson, David Ross
- PA The University of Liverpool, UK; Clatterbridge Cancer Research Trust
- SO PCT Int. Appl., 75 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 2004031239	A2	20040415	WO 2003-GB4279	20031002
	WO 2004031239	A3	20040527		

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    AU 2003273502
                      A1 20040423
                                         AU 2003-273502
PRAI GB 2002-22787
                               20021002
                         Α
    WO 2003-GB4279
                         W
                               20031002
    ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
1.6
    Compositions and methods for using a solid support to
ΤI
    purify RNA
AΒ
    The invention concerns a method for purifying substantially pure and
    undegraded RNA from biol. material comprising RNA,
    comprising the steps of: (a) mixing the biol. material with an RNA
    Lysing/Binding Solution buffered at a pH of greater than about 7, the
    RNA Lysing/Binding Solution comprising an RNA-complexing
    salt; (b) contacting the mixture to a solid support such
    that nucleic acids comprising substantially undegraded RNA in
    the mixture preferentially bind to the solid support;
     (c) washing the solid support with a series of
    RNA wash solns. to remove biol. materials other than bound nucleic
    acids comprising substantially undegraded RNA, wherein the
    series of wash solns. comprises a first wash comprising alc. and an
    RNA-complexing salt at a concentration of at least 1 M and a second wash
    comprising an alc., buffer and an optional chelator; and (d)
    preferentially eluting the bound substantially undegraded RNA
    from the solid support with an RNA Elution
    Solution in order to obtain substantially pure and undegraded RNA.
    Reagents, methods and kits for the purification of RNA from biol.
    materials are provided.
ΑN
    2004:80382 HCAPLUS <<LOGINID::20080303>>
DN
    140:107795
    Compositions and methods for using a solid support to
ΤI
    purify RNA
ΙN
    Bair, Robert Jackson; Heath, Ellen M.; Meehan, Heather; Paulsen, Kim
    Elayne; Wages, John M.
PΑ
SO
    U.S. Pat. Appl. Publ., 19 pp., Cont.-in-part of U.S. Ser. No. 974,798.
    CODEN: USXXCO
DT
    Patent
    English
LA
FAN.CNT 3
                       KIND
    PATENT NO.
                               DATE
                                           APPLICATION NO.
                                                                  DATE
                       ____
    _____
                               _____
                                           ______
                       A1
B2
                                           US 2003-418194
PΙ
    US 2004019196
                               20040129
                                                                  20030416
    US 7148343
                               20061212
                       A1
    US 2003073830
                               20030417
                                           US 2001-974798
                                                                  20011012
                        A1
    CA 2463317
                               20030424
                                           CA 2001-2463317
                                                                  20011012
                       A1
    AU 2002211719
                               20030428
                                           AU 2002-211719
                                                                  20011012
    AU 2002211719
                        В2
                               20070614
    EP 1438426
                         Α1
                              20040721
                                          EP 2001-979794
                                                                  20011012
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                        T
    JP 2005505305
                               20050224
                                          JP 2003-536461
                                                                  20011012
```

JP 3979996

В2

20070919

```
AU 2004233035 A1 20041104 AU 2004-233035 CA 2522446 A1 20041104 CA 2004-2522446
                                                                   20040415
                                                                   20040415
                        A2
                             20041104 WO 2004-US12033
     WO 2004094635
                                                                   20040415
     WO 2004094635
                        A3
                             20041216
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
                                          EP 2004-760008
     EP 1618194
                              20060125
                         A2
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
     JP 2006523463 T 20061019 JP 2006-513124 20040415
                        A1
A1
A2
W
     US 2005032105
                               20050210
                                           US 2004-909724
                                                                  20040802
                                         US 2006-589364
                                                                  20061030
     US 2007043216
                               20070222
                             20011012
PRAI US 2001-974798
    WO 2001-US32073
US 2003-418194
WO 2004-US12033
                               20011012
                        A
                             20030416
20040415
                         W
             THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 56
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L6
    ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
ΤI
     Use and evaluation of a [2+2] photocycloaddition in immobilization of
     oligonucleotides on a three-dimensional hydrogel matrix
     The present invention provides solid supports (e.g., glass) and polymer
AΒ
     hydrogels (particularly polymer hydrogel arrays present on a solid
     support) comprising one or more reactive sites for the attachment
     of biomols., as well as biomols. comprising one or more reactive sites for
     attachment to solid supports and polymer hydrogels. The invention further
     provides novel compns. and methods for the preparation of biomols., solid
     supports, and polymer hydrogels comprising reactive sites. The invention
     also provides for preparation of crosslinked solid supports, polymer hydrogels,
     and hydrogel arrays, wherein one or more biomols. is attached by means of
     the reactive sites in a photocycloaddn. reaction. Advantageously,
     according to the invention, crosslinking of the hydrogel and attachment of
     biomols. can be done in a single step. Genes having different expression
     levels were measured simultaneously using biotin-labeled cRNA generated
     from human placenta, brain, and heart mRNA. The microarray
     could detect gene expression at 3 copy per cell.
     2003:511934 HCAPLUS <<LOGINID::20080303>>
ΑN
    139:65764
DN
     Use and evaluation of a [2+2] photocycloaddition in immobilization of
ΤI
     oligonucleotides on a three-dimensional hydrogel matrix
IN
     Elghanian, Robert; Brush, Charles K.; Xu, Yanzheng
     Amersham Biosciences AB, USA
PΑ
     U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 344,620.
SO
     CODEN: USXXCO
DT
     Patent
```

KIND DATE APPLICATION NO. DATE

\_\_\_\_\_

20010809

-----

US 2003124525 A1 20030703 US 2001-928250 US 6664061 B2 20031216

English

PATENT NO.

LA

PΤ

FAN.CNT 5

```
US 6372813
                        В1
                               20020416
                                         US 1999-344620
                                                                  19990625
                        A1
                                          US 2001-25185
     US 2002146730
                               20021010
                                                                  20011219
                        В2
     US 6921638
                               20050726
     US 2003096265
                         Α1
                                           US 2002-185279
                                                                  20020628
                               20030522
     WO 2003014392
                                           WO 2002-IB4038
                         A2
                               20030220
                                                                  20020809
     WO 2003014392
                         А3
                               20031106
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
             CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20030224 AU 2002-341259
                                                                  20020809
     AU 2002341259
                        A1
PRAI US 1999-344620
                         Α2
                               19990625
     US 2000-224070P
                         Ρ
                               20000809
                         Р
     US 2000-232305P
                               20000912
     US 2001-928250
                         Α2
                               20010809
     WO 2002-IB4038
                         W
                               20020809
     ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
L6
TI
     Methods, reagents and kits for isolating RNA from environmental
     or biological samples
     Reagents, methods and kits for the purification of RNA from biol. or
AB
     environmental samples are provided. The method comprises mixing said
     material with an RNA binding solution buffered at a pH of greater
     than 7 wherein the RNA binding solution comprises an RNA
     complexing salt from from strong chaotropic agents. RNA is
     bound to non-silica solid support selected from
     cellulose, cellulose acetate, nitrocellulose,
     nylon, polyester, polyethersulfone,
     polyolefin, or polyvinylidene fluoride. The non-silica
     solid support is contained in a vessel such as
     centrifuge tubes, spin tubes, syringes, cartridges, chambers, multiple
     well plates and test tubes.
ΑN
     2003:300642 HCAPLUS <<LOGINID::20080303>>
DN
     138:317132
ΤI
     Methods, reagents and kits for isolating RNA from environmental
     or biological samples
ΙN
     Heath, Ellen M.; Wages, John M.
PA
     U.S. Pat. Appl. Publ., 14 pp.
SO
     CODEN: USXXCO
DT
     Patent
LA
     English
FAN.CNT 3
                                          APPLICATION NO.
     PATENT NO.
                       KIND
                               DATE
     _____
                        ____
                               _____
                                           ______
                               20030417
                                         US 2001-974798
     US 2003073830
                        A1
PΙ
                                                                  20011012
     CA 2463317
                         Α1
                               20030424
                                           CA 2001-2463317
     WO 2003033739
                        A1
                               20030424
                                          WO 2001-US32073
                                                                  20011012
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN,
             YU, ZA, ZW
```

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,

```
KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002211719
                                20030428
                                           AU 2002-211719
                                                                   20011012
                         Α1
    AU 2002211719
                                20070614
                         B2
                         Α1
                                20040721
                                            EP 2001-979794
     EP 1438426
                                                                   20011012
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2005505305
                         Τ
                               20050224
                                            JP 2003-536461
                                                                   20011012
     JP 3979996
                         В2
                               20070919
     US 2004019196
                         Α1
                               20040129
                                            US 2003-418194
                                                                   20030416
     US 7148343
                         В2
                               20061212
     US 2005032105
                        A1
                               20050210
                                            US 2004-909724
                                                                   20040802
     US 2007043216
                        A1
                               20070222
                                            US 2006-589364
                                                                   20061030
PRAI US 2001-974798
                               20011012
                         A
     WO 2001-US32073
                         W
                                20011012
     US 2003-418194
                        A2
                                20030416
```

L6 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ΤI Detection of methylated DNA by bisulfite modification and ligand binding AΒ In a first aspect, the present invention provides a method for detecting presence of a target DNA in a sample, the method comprising: (a) treating a sample containing DNA with an agent that modifies unmethylated cytosine; (b) providing to the treated sample a detector ligand capable of binding to a target region of DNA and allowing sufficient time for a detector ligand to bind to a target DNA; and (c) measuring binding of the detector ligand to DNA in the sample to determine the presence of the target DNA in a sample. a second aspect, the present invention provides a method for estimating extent of methylation of a target DNA in a sample, the method comprising: (a) treating a sample containing DNA with an agent that modifies unmethylated cytosine; (b) providing to the treated sample a detector ligand capable of distinguishing between methylated and unmethylated cytosine of DNA and allowing sufficient time for a detector ligand to bind to a target DNA; and (c) detecting binding of the detector ligand to DNA in the sample such that the degree or amount of binding is indicative of the extent of methylation of the target DNA. In step (b), two detector ligands can be used where one ligand is capable of binding to a region of DNA that contains one or more methylated cytosines and the other ligand capable of binding to a corresponding region of DNA that contains no methylated cytosines. The methods of the present invention can be applied for the detection of any DNA using one ligand (preferably an oligonucleotide or PNA) bound to a solid support and one coupled to a microsphere. Natural oligonucleotides or PNAs may be used, but PNAs were preferred because of their specificity and rate of hybridization. In one particular adaptation, the methods of the invention can be used to distinguish the presence of methylated cytosines in DNA that has been treated with sodium bisulfite. The specificity of hybridization can be used to discriminate against mols. that have not reacted completely with bisulfite (one or more cytosines not converted to uracil) as well as distinguishing between methylated cytosines at CpG sites (which remain as cytosines) and unmethylated CpG sites where the cytosine is converted to uracil. Detection of methylated promoter sequences of the glutathione-S-transferases (GSTP1) zone is described.

AN 2002:368688 HCAPLUS <<LOGINID::20080303>>

DN 136:382540

TI Detection of methylated DNA by bisulfite modification and ligand binding

IN Grigg, Geoffrey Walter; Molloy, Peter; Millar, Douglas Spencer

PA Human Genetic Signatures Pty. Ltd., Australia

SO PCT Int. Appl., 77 pp. CODEN: PIXXD2

DT Patent

```
LΑ
   English
FAN.CNT 1
                       KIND DATE
                                      APPLICATION NO. DATE
     PATENT NO.
                    7.1 DAIE
                                          _____
     _____
                        A1 20020516 WO 2001-AU1465 20011112
    WO 2002038801
PΤ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                        A5 20020521 AU 2002-14811 20011112
A1 20030827 EP 2001-983298 20011112
     AU 2002014811
     EP 1337662
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004086944
                            20040506
                                          US 2003-416637
                                                                  20031020
                        A1
PRAI AU 2000-1425
                               20001113
                         Α
     WO 2001-AU1465
                        W
                               20011112
             THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 8
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
L6
     Statistical evaluation of differential expression on cDNA nylon
ΤI
     arrays with replicated experiments
AΒ
     In this paper we focus on the detection of differentially expressed genes
     according to changes in hybridization signals using statistical tests.
     These tests were applied to 14 208 zebrafish cDNA clones that were
     immobilized on a nylon support and hybridized with radioactively
     labeled target mRNA from wild-type and lithium-treated
     zebrafish embryos. The methods were evaluated with respect to 16 control
     clones that correspond to eight different genes which are known to be
     involved in dorso-ventral axis specification. Moreover, 4608 Arabidopsis
     thaliana clones on the same array were used to judge statistical
     significance of expression changes and to control the false pos. rates of
     the test decisions. Utilizing this special array design we show that
     differential expression of a high proportion of cDNA clones (15/16) and
     the resp. genes (7/8) were identified, with a false pos. error of <5%
     using the constant control data. Furthermore, we investigated the influence
     of the number of repetitions of expts. on the accuracy of the procedures with
     exptl. and simulated data. Our results suggest that the detection of
     differential expression with repeated hybridization expts. is an accurate
     and sensitive way of identifying even small expression changes (1:1.5) of
     a large number of genes in parallel.
     2001:909871 HCAPLUS <<LOGINID::20080303>>
ΑN
    136:335743
DN
ΤI
     Statistical evaluation of differential expression on cDNA nylon
     arrays with replicated experiments
```

- DN 136:335743
  TI Statistical evaluation of differential expression on cDNA nylon arrays with replicated experiments
  AU Herwig, Ralf; Aanstad, Pia; Clark, Matthew; Lehrach, Hans
  CS Max-Planck Institut fur Molekulare Genetik, Berlin, D-14195, Germany
  Nucleic Acids Research (2001), 29(23), e117/1-e117/9
  CODEN: NARHAD; ISSN: 0305-1048
- PB Oxford University Press
- DT Journal
- LA English
- RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
Methods and compositions for assaying analytes
ТΤ
     Compns. and methods for assaying analytes, preferably, small mol. analytes
AΒ
     are provided. Assay methods employ, in place of antibodies or mols. that
     bind to target analytes or substrates, modified enzymes, called substrate
     trapping enzymes. These modified enzymes retain binding affinity or have
     enhanced binding affinity for a target substrate or analyte, but have
     attenuated catalytic activity with respect to that substrate or analyte.
     The modified enzymes are provided. In particular, mutant
     S-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding
     affinity or having enhanced binding affinity for homocysteine or
     S-adenosylhomocysteine but having attenuated catalytic activity, are
     provided. Conjugates of the modified enzymes and a facilitating agent,
     such as agents that aid in purification or linkage to a solid
     support are also provided.
     2001:31675 HCAPLUS <<LOGINID::20080303>>
ΑN
DN
     134:83111
    Methods and compositions for assaying analytes
ΤI
     Yuan, Chong-Sheng
ΙN
PA
     General Atomics, USA
     PCT Int. Appl., 187 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 3
                                           APPLICATION NO.
     PATENT NO.
                        KIND DATE
    WO 2001002600
WO 2001002600
                        ____
                        A2
                                20010111
                                           WO 2000-US18057
                                                                    20000630
PΙ
                        А3
                              20020110
                         A9 20020725
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6376210
                         B1 20020423 US 1999-347878
                                                                   19990706
     CA 2377665
                         A1
                               20010111
                                          CA 2000-2377665
     GB 2368641
                               20020508
                                          GB 2002-425
                                                                   20000630
                         Α
GB 2368641 B 20041006
PRAI US 1999-347878 A 19990706
US 1999-457205 A 19991206
WO 2000-US18057 W 20000630
=> d his
     (FILE 'HOME' ENTERED AT 15:07:02 ON 03 MAR 2008)
     FILE 'HCAPLUS' ENTERED AT 15:09:46 ON 03 MAR 2008
L1
         629630 S RNA OR RIBONUCLEIC OR MRNA
L2
        1911722 S KOSMOTROP? OR LITHIUM OR SODIUM OR CESIUM OR POTASSIUM OR RUB
L3
           9171 S SOLID SUPPORT
         771205 S CELLULOSE OR NYLON OR POLYESTER OR POLYETHERSULFONE OR POLYOL
T.4
```

FILE 'STNGUIDE' ENTERED AT 15:09:54 ON 03 MAR 2008

7 S L1 AND L2 AND L3 AND L4

53 S L1 AND L2 AND L3

L5

L6

FILE 'HCAPLUS' ENTERED AT 15:10:07 ON 03 MAR 2008

# FILE 'STNGUIDE' ENTERED AT 15:10:07 ON 03 MAR 2008

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	26.92
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-5.60

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 15:10:11 ON 03 MAR 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

### PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'STNGUIDE' AT 15:30:23 ON 03 MAR 2008 FILE 'STNGUIDE' ENTERED AT 15:30:23 ON 03 MAR 2008 COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 0.06	SESSION 26.92
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY 0.00	SESSION -5.60
=> file hcaplus COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.18	27.04
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY 0.00	SESSION -5.60

FILE 'HCAPLUS' ENTERED AT 15:32:00 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing

of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (RNA or mRNA or ribonucleic) 3a(purification or isolation)

# MISSING OPERATOR BONUCLEIC) 3A

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s 17 and 12 and 13

# L7 NOT FOUND

The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s 18 and (PY<2002 or AY<2002 or PRY<2002)

## L8 NOT FOUND

The L-number entered could not be found. To see the definition of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.69	29.73
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-5.60

FILE 'STNGUIDE' ENTERED AT 15:32:03 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> file hcaplus

-/ IIIe ncapius		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	29.79
DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
2	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-5.60

FILE 'HCAPLUS' ENTERED AT 15:32:16 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s (RNA or mRNA or ribonucleic) (3a) (purification or isolation)

345799 RNA

320645 MRNA

195230 RIBONUCLEIC

350340 PURIFICATION

272054 ISOLATION

L7 4746 (RNA OR MRNA OR RIBONUCLEIC)(3A)(PURIFICATION OR ISOLATION)

=> s 17 and 12 and 13

L8 5 L7 AND L2 AND L3

=> s 18 and (PY<2002 or AY<2002 or PRY<2002)

21938793 PY<2002

4200400 AY<2002

3673784 PRY<2002

L9 3 L8 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> file stnquide

SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION FULL ESTIMATED COST 2.69 32.48 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -5.60 0.00

FILE 'STNGUIDE' ENTERED AT 15:32:21 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> d 19 1-3 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

- L9 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support
- AB The present invention relates to a method of isolating nucleic acid from a blood sample. The method involves selectively isolating leukocytes from said sample by binding said leukocytes to a solid support containing a binding partner specific for the leukocyte, for example an antibody. The antibody can bind an antigen selected from one of more of the following: HLA-I, CD11a, CD18, CD45, CD46, CD50, CD82, CD162, CD5 and CD15 and a specific example shows a combination of CD45 and CD15. The said leukocytes are lysed in detergents to release nucleic acids which are subsequently bound to a second solid support which is neg. charged. Kits for isolating nucleic acid from samples form further embodiments of the invention.
- AN 2001:904506 HCAPLUS <<LOGINID::20080303>>
- DN 136:15912
- TI Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support
- IN Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack
- PA Dynal Biotech Asa, Norway; Jones, Elizabeth Louise
- SO PCT Int. Appl., 51 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

,	PAT	ENT 1	KIND DATE			APPLICATION NO.						DATE							
ΡI	WO	WO 2001094572			A1	_	2001	1213		WO 2	 001-	 GB24	 72		20010605 <			<	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MΖ,	NO,	NZ,	PL,	PT,	
			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	
			UΖ,	VN,	YU,	ZA,	ZW		·		•		•	·	·	•	·		
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
			DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
						CI,								•	•		·	·	
	CA	2410															0010	605	<
		1290				A1													
	ΕP	1290	155			В1		2006	0809										
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
						LV,													
	ΑT	3358	15			T		2006	0915		AT 2	001-	9342	05		2	010	605	<
	ES	2269.	399			Т3		2007	0401		ES 2	001-	9342	05		2	0010	605	<
	US	2003	1807					2003									0030	430	<
PRAI	.I GB 2000-13658 A					20000605 <													
	WO	2001	-GB2	472		W		2001	0605	<-	_								
RE.CI	NT	4	TH	ERE	ARE	4 CI	TED	REFE	RENC:	ES A	VAIL.	ABLE	FOR	THI	S RE	CORD			

- L9 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions for isolating nucleic acids

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation. The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a

```
microporous membrane for final isolation of the precipitated nucleic acids,
    resulting in high yield and purity of the precipitated nucleic acid.
    1997:400479 HCAPLUS <<LOGINID::20080303>>
DN
    127:78238
    Methods and compositions for isolating nucleic acids
    Wiggins, James C.
    USA
    U.S., 15 pp.
    CODEN: USXXAM
    Patent
    English
LA
FAN.CNT 1
    PATENT NO.
                   KIND DATE APPLICATION NO. DATE
                       ____
                                          _____
                       A 19970610 US 1993-115184 19930831 <--
PI US 5637687
PRAI US 1993-115184
                              19930831 <--
    ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2008 ACS on STN
ΤI
    Isolation of nucleic acid from biological sample, method comprising
    nucleic acid binding to solid support then separation
    from support, and kit comprising detergents and other components
    The present invention provides a method of isolating nucleic acid from a
    sample, said method comprising contacting said sample with a detergent and
    a solid support, whereby soluble nucleic acid in said
    sample is bound to the support, and separating said support with bound nucleic
    acid from the sample. Where the method of the invention is used to
    isolate DNA, it may conveniently be coupled with a further step to isolate
    RNA from the same sample.
ΑN
    1996:458048 HCAPLUS <<LOGINID::20080303>>
    125:107039
    Isolation of nucleic acid from biological sample, method comprising
    nucleic acid binding to solid support then separation
    from support, and kit comprising detergents and other components
    Deggerdal, Arne Helge; Larsen, Frank
    Dynal A/s, Norway; Dzieglewska, Hanna Eva
    PCT Int. Appl., 53 pp.
    CODEN: PIXXD2
    Patent
    English
FAN.CNT 1
                 KIND DATE APPLICATION NO. DATE
    PATENT NO.
    WO 9618731 A2 19960620 WO 1995-GB2893 19951212 <---
WO 9618731 A3 19960912
        W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES,
            FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU,
            LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
            SI, SK
        RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
            IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR,
            NE, SN, TD, TG
                                           CA 1995-2207608
    CA 2207608
                         Α1
                               19960620
                                                                 19951212 <--
    AU 9641829
                        Α
                               19960703
                                          AU 1996-41829
                                                                 19951212 <--
                        В2
    AU 706211
                               19990610
               A2 19970924
B1 20040728
    EP 796327
                                         EP 1995-940351
                                                                 19951212 <--
    EP 796327
        R: AT, BE, CH, DE, FR, GB, IT, LI, SE
    JP 11501504 T 19990209 JP 1996-518463
JP 3787354 B2 20060621
AT 272110 T 20040815 AT 1995-940351
                                                                 19951212 <--
    JP 3787354
AT 272110
    AT 272110 T 20040815 AT 1995-940351 US 2004215011 A1 20041028 US 1997-849686
                                                                 19951212 <--
                                                                 19970821 <--
```

ΑN

ΤI

INPA

SO

DT

L9

AΒ

DN ΤI

ΙN

PΑ

SO

DT

PΙ

PRAI	US 2007190559 GB 1994-25138 WO 1995-GB2893 US 1997-849686	B2 2007020	6 US 2 2 < 2 < 1 <	005-234001 007-671426	20050923 < 20070205 <							
=> d	his											
	(FILE 'HOME' ENTERED	AT 15:07:02 O	N 03 MAR	2008)								
L1 L2 L3 L4 L5	9171 S SOLID S 771205 S CELLULO 53 S L1 AND	RIBONUCLEIC OR OP? OR LITHIUM UPPORT SE OR NYLON OR	MRNA OR SODIU POLYESTE	M OR CESIUM OF	R POTASSIUM OR RUB							
	FILE 'STNGUIDE' ENTE	RED AT 15:09:5	4 ON 03 M	AR 2008								
	FILE 'HCAPLUS' ENTERED AT 15:10:07 ON 03 MAR 2008											
	FILE 'STNGUIDE' ENTE	RED AT 15:10:0	7 ON 03 M	AR 2008								
	FILE 'HCAPLUS' ENTER	ED AT 15:32:00	ON 03 MA	R 2008								
	FILE 'STNGUIDE' ENTE	RED AT 15:32:0	3 ON 03 M	AR 2008								
L7 L8 L9	5 S L7 AND	MRNA OR RIBON	UCLEIC)(3	A) (PURIFICATIO	ON OR ISOLATION)							
	FILE 'STNGUIDE' ENTE	RED AT 15:32:2	1 ON 03 M	AR 2008								
	FILE 'HCAPLUS' ENTER	ED AT 15:32:27	ON 03 MA	R 2008								
	FILE 'STNGUIDE' ENTE	RED AT 15:32:2	8 ON 03 M	AR 2008								
	g hold IN U.S. DOLLARS			SINCE FILE ENTRY	TOTAL SESSION							
FULL	ESTIMATED COST			0.06	44.02							
DISCO	OUNT AMOUNTS (FOR QUA	LIFYING ACCOUN	TS)	SINCE FILE ENTRY	TOTAL SESSION							
CA SU	CA SUBSCRIBER PRICE  ENTRY SESSION  0.00 -8.00											

SESSION WILL BE HELD FOR 120 MINUTES STN INTERNATIONAL SESSION SUSPENDED AT 15:32:34 ON 03 MAR 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

### LOGINID: SSPTAEXO1623

## PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'STNGUIDE' AT 16:17:31 ON 03 MAR 2008 FILE 'STNGUIDE' ENTERED AT 16:17:31 ON 03 MAR 2008 COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	44.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.00
=> file hcaplus COST IN U.S. DOLLARS	SINCE FILE	TOTAL
DILL BORTMARD COOR	ENTRY	SESSION
FULL ESTIMATED COST	0.06	44.02
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-8.00

FILE 'HCAPLUS' ENTERED AT 16:17:40 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

- => d 110 1-27 ti
- L10 ANSWER 1 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
  TI Use and evaluation of a [2+2] photocycloaddition in immobilization of oligonucleotides on a three-dimensional hydrogel matrix

- L10 ANSWER 2 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Sequences of novel human muscle specific sarcomeric calcineurin-binding proteins (calsarcins) and diagnostic and therapeutic uses thereof
- L10 ANSWER 3 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Schiff base reductant co-dispense process
- L10 ANSWER 4 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Detection of methylated DNA by bisulfite modification and ligand binding
- L10 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods relating to nucleic acid amplification and methylation profiling by fluorescence melting curve analysis
- L10 ANSWER 6 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Surface treatment activation of glass substrates by oxidation with aldehyde groups and fixation of coupling agents for bio-chips micro-arrays
- L10 ANSWER 7 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and kits for isolating nucleic acids from leukocytes by binding to antibodies on a solid support
- L10 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods for solid-phase amplification of DNA template (spadt) using multiarrays
- L10 ANSWER 9 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods for identifying RNA binding compounds
- L10 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions for assaying analytes
- L10 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Immobilization of unmodified biopolymers to acyl fluoride activated substrates
- L10 ANSWER 12 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods for preventing cross-contamination in solid support-based assays
- L10 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods for detecting and measuring spliced nucleic acids and method of cytoplasmic nucleic acid preparation
- L10 ANSWER 14 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Nucleic acid-coupled colorimetric analyte detectors using self-assembling polydiacetylenic materials
- L10 ANSWER 15 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Hybridization detection of nucleic acids by pretreating bound single-stranded probes
- L10 ANSWER 16 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Chemically modified nucleic acids having enhanced lability towards solid supports, and uses thereof in high-density microarrays
- L10 ANSWER 17 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Functionalization of the Sugar Moiety of Oligoribonucleotides on Solid Support
- L10 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN

- TI Nucleic acid archiving by irreversible binding to solid supports and use in various assays
- L10 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions for isolating nucleic acids
- L10 ANSWER 20 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Method for immobilizing nucleic acid molecules to be used in nucleic acid analysis
- L10 ANSWER 21 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of nucleic acid from biological sample, method comprising nucleic acid binding to solid support then separation from support, and kit comprising detergents and other components
- L10 ANSWER 22 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Pentavalent synthesis of oligonucleotides containing stereospecific alkylphosphonates and arylphosphonates
- L10 ANSWER 23 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Use of the 1-(2-fluorophenyl)-4-methoxypiperidin-4-yl (Fpmp) protecting group in the solid-phase synthesis of oligo- and poly-ribonucleotides
- L10 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Fixation method and compositions for in situ detection and identification of nucleic acid sequences
- L10 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Analytical method and kit for detecting and measuring specifically sequenced nucleic acid using fluorescent intercalation compounds and waveguides as solid support
- L10 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI A rapid and simple method for purifying tRNA
- L10 ANSWER 27 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Solid-phase synthesis of the RNA fragment: rAAGAAGAAGAAGA

=> file stnguide COST IN U.S. DOLLARS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 12.41 56.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL FILE TOTAL FILE SESSION

ENTRY SESSION
CA SUBSCRIBER PRICE

0.00
-8.00

FILE 'STNGUIDE' ENTERED AT 16:18:03 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> d 110 5 8 10 11 13 18 19 24 25 26 ti abs bib YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

- L10 ANSWER 5 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods relating to nucleic acid amplification and methylation profiling by fluorescence melting curve analysis
- AB The invention provides improved methods for determining the methylation profile of a nucleic acid sequence and for determining one or more base changes in the target nucleic acid sequence as compared to a corresponding control sequence. The methods are one-step methods which can be incorporated with known amplification techniques such as PCR. The invention also provides methods for determining changes in nucleic acid sequences either via their methylation profile or owing to mutations of one or more bases. The inventors have shown that fluorescence melting curve anal. is a fast and cost-effective method that can be fully integrated with PCR for detection of aberrant DNA methylation patterns. Once the bisulfite conversion of sample DNA has been performed, screening of samples can be completed in less than 45 min by using standard PCR reagents. One of the strongest features of the present method is that it can resolve heterogeneous methylation patterns.
- AN 2002:332370 HCAPLUS <<LOGINID::20080303>>
- DN 136:351365
- TI Methods relating to nucleic acid amplification and methylation profiling by fluorescence melting curve analysis
- IN Guldberg, Per
- PA Cancer Research Ventures Limited, UK; Cancer Research Technology Ltd.
- SO PCT Int. Appl., 71 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

r AN.	PAT		KIND DATE			APPLICATION NO.												
PI	-	2002034942 2002034942			A2			0502		WO 2001-GB4707					20011023 <			
			CO, GM, LS, PT, US, GH, KZ,	CR, HR, LT, RO, UZ, GM, MD,	CU, HU, LU, RU, VN, KE, RU,	CZ, ID, LV, SD, YU, LS, TJ,	DE, IL, MA, SE, ZA, MW, TM,	DK, IN, MD, SG, ZW MZ, AT,	DM, IS, MG, SI, SD, BE,	DZ, JP, MK, SK, SL, CH,	EC, KE, MN, SL, SZ, CY,	EE, KG, MW, TJ, TZ, DE,	ES, KP, MX, TM, UG, DK,	FI, KR, MZ, TR, ZW, ES,	GB, KZ, NO, TT, AM, FI,	GD, LC, NZ, TZ, AZ, FR,	CH, GE, LK, PH, UA, GB, GA,	GH, LR, PL, UG, KG, GR,
	$C\Delta$	2425						SN,	•		CA 21	001-	2425	9 በ 4		21	00111	N23 <
	AU	2002	0107	00					0506	CA 2001-2425904 AU 2002-10700						20011023 <		
	EP																	023 <
		K:			•	•		RO,	•	•	•		⊔⊥,	ь∪,	ΝL,	DE,	MC,	PT,
	JР	2004		•	•				•				5379	11		2	00110	023 <
		2004						2004	0311		US 2	003-	3998	99		2	00310	003 <
PRAI	GB	GB 2000-25913 GB 2001-7547 TO 2001-GB4707				Α		2000 2001 2001	0326	<-	_							

- L10 ANSWER 8 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI}$  Methods for solid-phase amplification of DNA template (spadt) using multiarrays
- AB The present invention relates to a novel method of detecting specific nucleic acids in a biol. sample using solid-phase amplification of DNA template (SPADT) using multiarrays. SPADT has several advantages over conventional PCR. It abolishes the need to run hundreds of parallel

reactions when one of many possible target genes is being attempted. By crosslinking both forward and reverse primers to solid support, it is possible to avoid the competition between different sets of primer pairs commonly observed in multiplex PCR. The DNA template being adsorbed to the solid-phase allows relatively high localized concns. of DNA using small DNA samples.

AN 2001:293635 HCAPLUS <<LOGINID::20080303>>

DN 134:321550

- TI Methods for solid-phase amplification of DNA template (spadt) using multiarrays
- IN Rovera, Giovanni; Mukhopadhyay, Sunil
- PA The Wistar Institute, USA
- SO U.S., 49 pp. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6221635	B1	20010424	US 1999-306290	19990506 <
PRAI US 1999-306290		19990506	<	

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 10 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions for assaying analytes
- AB Compns. and methods for assaying analytes, preferably, small mol. analytes are provided. Assay methods employ, in place of antibodies or mols. that bind to target analytes or substrates, modified enzymes, called substrate trapping enzymes. These modified enzymes retain binding affinity or have enhanced binding affinity for a target substrate or analyte, but have attenuated catalytic activity with respect to that substrate or analyte. The modified enzymes are provided. In particular, mutant S-adenosylhomocysteine (SAH) hydrolases, substantially retaining binding affinity or having enhanced binding affinity for homocysteine or S-adenosylhomocysteine but having attenuated catalytic activity, are provided. Conjugates of the modified enzymes and a facilitating agent, such as agents that aid in purification or linkage to a solid support are also provided.
- AN 2001:31675 HCAPLUS <<LOGINID::20080303>>
- DN 134:83111
- TI Methods and compositions for assaying analytes
- IN Yuan, Chong-Sheng
- PA General Atomics, USA
- SO PCT Int. Appl., 187 pp.

CODEN: PIXXD2

- DT Patent
- LA English
- FAN.CNT 3

	PATENT NO.					KIND DATE				APPLICATION NO.					DATE			
PΤ	HO 2001002600				A2 20010111			,	WO 2000-US18057					20000630 <				
PI	WO 2001002600 WO 2001002600			A2 A3						NO 2000 0510057					20000050 <			
	WO 2001002600				A9 20020725													
		$\mathbb{W}$ :	ΑE,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
			CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
			IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NΖ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
			SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW	
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	BJ,

```
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6376210 B1 20020423 US 1999-347878
                                                                 19990706 <--
                        A1
     CA 2377665
                               20010111
                                          CA 2000-2377665
                                                                20000630 <--
                                          GB 2002-425
    GB 2368641
GB 2368641
                        A 20020508
                                                                20000630 <--
                        В
                             20041006
PRAI US 1999-347878 A 19990706 <--
US 1999-457205 A 19991206 <--
WO 2000-US18057 W 20000630 <--
L10 ANSWER 11 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
    Immobilization of unmodified biopolymers to acyl fluoride activated
AΒ
     A method of attaching unmodified biopolymers, particularly, unmodified
     polynucleotides, directly to a solid support is
     provided. The method includes the steps of (a) providing unmodified
     biopolymers; (b) providing a solid support having at
     least one surface comprising pendant acyl fluoride functionalities; and
     (c) contacting the unmodified biopolymers with the solid
     support under a condition sufficient for allowing the attachment
     of the biopolymers to the solid support. The
     unmodified biopolymers may be nucleic acids, polypeptides, proteins,
     carbohydrates, lipids and analogs thereof. The unmodified polynucleotides
     may be DNA, RNA or synthesized oligonucleotides. The DNA may be
     single or double stranded. A device including a solid
     support and unmodified biopolymers attached to the solid
     support by reaction with the pendant acyl fluoride functionalities
     of the solid support is also provided. The methods
     and devices of the present invention may be used in performing
     hybridization assays and immunoassays.
ΑN
     2000:824447 HCAPLUS <<LOGINID::20080303>>
DN
    134:2337
TΙ
    Immobilization of unmodified biopolymers to acyl fluoride activated
     substrates
ΙN
    Matson, Robert S.; Milton, Raymond C.
PΑ
     Beckman Coulter, Inc., USA
SO
    PCT Int. Appl., 41 pp.
    CODEN: PIXXD2
DT
    Patent
    English
FAN.CNT 1
                  KIND DATE APPLICATION NO. DATE
     PATENT NO.
                       ____
    WO 2000070088 A2 20001123 WO 2000-US12729 20000510 <--
WO 2000070088 A3 20020328
PΙ
        W: JP
        RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
            PT, SE
     US 6268141
                               20010731
                                          US 1999-312095
                                                                 19990512 <--
                         В1
     EP 1208226
                        A2 20020529
                                         EP 2000-928944
                                                                 20000510 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
     JP 2002544508
                               20021224
                                           JP 2000-618493
                                                                 20000510 <--
                        A1
     US 2001039018
                               20011108
                                          US 2001-872052
                                                                 20010531 <--
PRAI US 1999-312095
                               19990512 <--
                        A
     WO 2000-US12729
                        W
                               20000510 <--
```

- L10 ANSWER 13 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods for detecting and measuring spliced nucleic acids and method of cytoplasmic nucleic acid preparation
- AB A simplified method for preparing a biol. sample to release cytoplasmic nucleic acid, preferably spliced mRNA, suitable for

amplification, while minimizing the release of nuclear genetic material is disclosed. A buffer containing a soluble salt with ionic strength of particular

range and a non-ionic detergent are used to lyse the cells. MRNA is then purified by contacting the sample with a solid support joined to an immobilized oligonucleotide which would form stable hybridization complex with the mRNA. Immobilized oligonucleotide preferably contains a poly-T sequence. A method of detecting and measuring the amount of fusion nucleic acid, notably spliced mRNA present in the sample, following nucleic acid amplification, is also disclosed. A fusion nucleic acid to be detected contain a splice junction site, and primers designed to have sequences complementary to and around the splice-junction site are used to amplify the nucleic acid. The amplified nucleic acid strand is detected with an oligonucleotide probe which specifically hybridizes to the amplified strand. Nucleic acid of chronic myelogenous leukemia patient and that resulting from bcr-abl translocation were detected by the method.

AN 2000:85055 HCAPLUS <<LOGINID::20080303>>

DN 132:147583

- TI Methods for detecting and measuring spliced nucleic acids and method of cytoplasmic nucleic acid preparation
- IN Harvey, Richard C.; Eastman, Paul S.
- PA Gen-Probe Incorporated, USA
- SO PCT Int. Appl., 52 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.CNT 1

	PATENT NO.					KINI	)	DATE	DATE .			APPLICATION NO.						DATE			
ΡΙ	WO	O 2000005418 W: AU, CA, JP			A1	_	2000	V	WO 1999-US16832						9990	723	<				
						DE,	DK.	ES,	FR.	GB,	GB, IT, LU, NL, SE										
	US	6849	,	,	,	в1	,	2005		,		•	, ,			19	9980	723	<		
	CA	CA 2337106				A1		2000	0203	(	CA	1999	-233	7106		19	9990	723	<		
	ΑU	AU 9951288				A1		2000	20000214 AU 1999-51288							19	9990	723	<		
	ΑU	7675	68			В2		2003	1113												
	ΕP	P 1109932				A1		2001	0627	I	ΞP	1999	-9359	912		19	9990	723	<		
	EΡ	1109932				В1		20040616													
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT	, LI,	LU,	NL,	SE,	MC,	PT,			
			ΙE,	FΙ																	
	JΡ	2002	52103	37		T		2002	0716	Ċ	JP	2000	-5613	364		19	9990	723	<		
	ΑT	2694	17			T		2004	0715	Z	TA	1999	-9359	912		19	9990	723	<		
	ES	2221	750			Т3		2005	0101	F	ΞS	1999	-9359	912		19	9990	723	<		
PRAI	US	1998	-1212	239		A		1998	19980723		_										
	US	1997	-5350	09P		P		1997	0723	<	_										
	WO	1999	-US1	6832		W		1999	0723	<	_										

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L10 ANSWER 18 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Nucleic acid archiving by irreversible binding to solid supports and use in various assays
- AB Claimed here are processes for nucleic acid binding to solid phase matrixes exhibiting sufficient hydrophilicity and electropositivity to irreversibly bind the nucleic acids from a sample, the nucleic acid then being useful for further assays or storage. These processes include nucleic acid (double or single stranded DNA and RNA) capture

from high volume: low concentration specimens, buffer changes, washes, and volume  $\ensuremath{\mathsf{volume}}$ 

redns., and enable the interface of solid phase bound nucleic acid with

enzyme, hybridization or amplification strategies. The invention, solid phase irreversibly bound nucleic acid, may be used, for example, in repeated analyses to confirm results or test addnl. genes in both research and com. applications. Further, a method is described for virus extraction, purification, and solid phase amplification from large volume plasma specimens.

AN 1998:712390 HCAPLUS <<LOGINID::20080303>>

DN 129:311697

- TI Nucleic acid archiving by irreversible binding to solid supports and use in various assays
- IN Gerdes, John C.; Marmaro, Jeffrey M.; Roehl, Christopher A.
- PA Immunological Associates of Denver, USA
- SO PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 6

11111	PATENT NO.			KIND DATE				APPLICATION NO.					DZ	ATE				
PI	WO	984679			A1	-	1998	1022		WO 1	 L998-	US77	07		19	9980	416	<
			U, CA, I, BE,		СА	DE.	DK	E.S.	ТŦ	FR	GB	GR	TE.	тт	T.II	мС	NI.	
			I, SE	C11,	C1,	וטט	DIC,	шо,	· · ,	L 1	OD,	OIV,	11,	± ± ,	шо,	110,	1111,	
		2286573					1998			CA 1	L998-	2286	573		19	9980	416	<
	_	2286573	_		C		2004	-		2.55		D100	1		1		416	
		9871271 745126			A B2		1998 2002			AU J	L998-	/12/.	Τ		Τ,	9980	416	<
		1003908			A1		2002			EP 1	1998-	9183	25		1 (	9980	416	<
		1003908			B1		2006					J = 00.				,,,,,	110	•
		R: A	Γ, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		II	E, FI,	CY														
	JΡ	2002512	2688		Τ		2002	0423		JP 1	L998-	5443	03		19	980	416	<
	JΡ	3666604	4		В2		2005	0629										
	ΑT	347615			T		2006	1215		AT 1	L998-	9183	25		19	9980	416	<
PRAI	US	1997-43	1999P		P		1997	0416	<-									
	WO	1998-US	S7707		W		1998	0416	<-	-								
RE.CI	TV	4	THERE .	ARE	4 CI	ΓED	REFE	RENCI	ES A	VAII	LABLE	FOR	THI	S RE	CORD			

L10 ANSWER 19 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN

ALL CITATIONS AVAILABLE IN THE RE FORMAT

- TI Methods and compositions for isolating nucleic acids
- AB Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a microporous membrane for final isolation of the precipitated nucleic acids, resulting in high yield and purity of the precipitated nucleic acid.
- AN 1997:400479 HCAPLUS <<LOGINID::20080303>>
- DN 127:78238
- TI Methods and compositions for isolating nucleic acids
- IN Wiggins, James C.
- PA USA
- SO U.S., 15 pp. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 5637687	A	19970610	US 1993-115184	19930831 <		
PRAI	US 1993-115184		19930831	<			

- L10 ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Fixation method and compositions for in situ detection and identification of nucleic acid sequences
- A method is provided for detection of nucleic acid of known hybridization AΒ specificity in the cells of a cell culture, tissue section, or direct specimen containing DNA and/or RNA by in situ hybridization anal. The method comprises (1) contacting the cells with a solid support in the presence of an alc. alkaline solution containing 50-90 volume% alc. and 0.01-0.5M alkali metal hydroxide, thereby affixing the cells to the solid support, rendering the cells permeable to the nucleic acid probe for hybridization anal., denaturing the DNA and any RNA containing secondary structure, and localizing the denatured DNA and/or RNA in its cellular environment; (2) reacting the cells affixed in 1 with a hybridization probe having a nucleic acid sequence complementary to the nucleic acid of known hybridization specificity; and (3) analyzing the reaction product of 2 for the formation of nucleic acid hybrids containing the hybridization probe. A reagent (BE) containing 70% EtOH and 0.07M NaOH provided fixation and hybridization reactivity comparable to either 60% or 80% EtOH, or 70% BE supplemented with NH4OAc and/or MgCl2. The use of 95% EtOH to fix the cells first followed by the combination BE reagent enhanced reactivity approx. 3-fold. The use of 95% EtOH, followed 1st by HCl and then by NaOH, provided no reactivity. The synergistic effect of the EtOH-NaOH combination was demonstrated. For herpes simplex virus amplification in CV1 cells cultured on a polystyrene surface or on a glass surface, the method of the invention gave similar hybridization reactivity for either support.
- AN 1992:546759 HCAPLUS <<LOGINID::20080303>>
- DN 117:146759
- TI Fixation method and compositions for in situ detection and identification of nucleic acid sequences
- IN Westlake, Grant M.; Scholl, David R.
- PA Diagnostic Hybrids, Inc., USA
- SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 9209704	A1	19920611	WO 1991-US8760	19911129 <
	W: AU, CA, JP				
	RW: AT, BE, CH,	DE, DK	, ES, FR, GE	B, GR, IT, LU, NL, SE	
	AU 9191373	A	19920625	AU 1991-91373	19911129 <
PRA:	I US 1990-619715	A	19901129 <	<	
	WO 1991-US8760	A	19911129 <	<	

- L10 ANSWER 25 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Analytical method and kit for detecting and measuring specifically sequenced nucleic acid using fluorescent intercalation compounds and waveguides as solid support
- AB A waveguide coated with single-stranded probe nucleic acids and carrying an internally reflected wave signal is contacted with an analyte solution containing denatured test DNA or RNA and fluorescent marker dye. Analyte nucleic acid with sequences homologous to that of the probe polynucleotide will hybridize therewith with concomitant binding of the fluorescent dye to the resultant duplex structures. Fluorescence

resulting from the interaction of the wave signal at the waveguide/analyte interface with the signal generating centers created within the space probed by the evanescent component of the wave signal is detected and provides useful information on said sequences homologous to that of the probe nucleic acids. A plate waveguide with poly(dA) affixed (preparation described for oligo dC on aminopropyl glass plate) was affixed into a flow cell and a base-line signal was obtained with buffer in the cell. Both ethidium bromide and poly-det were mixed and injected into the flow cell and the reaction was monitored. In a control, only ethidium bromide was added. The monitoring reaction was effectively immediate and only specific intercalation between double-stranded DNA was detected.

- AN 1988:403447 HCAPLUS <<LOGINID::20080303>>
- DN 109:3447
- TI Analytical method and kit for detecting and measuring specifically sequenced nucleic acid using fluorescent intercalation compounds and waveguides as solid support
- IN Sutherland, Ranald Macdonald; Bromley, Peter; Gentile, Bernard
- PA Battelle Memorial Institute, Switz.
- SO Eur. Pat. Appl., 50 pp.
- CODEN: EPXXDW
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.			KIND		DATE		API	PLICATIO	DATE	DATE		
PI	EP	245206 R: BE,	СН,	DE.	A1 ES.		1987:			 1987-810 L. SE	)274	19870430	<
	WO	8706956	J.,	,	A1		1987			1987-EP	234	19870502	<
		W: AU,	BR,	DK,	FΙ,	JP,	NO,	US					
	ΑU	8775838			А		1987	1201	AU	1987-758	338	19870502	<
	JΡ	01500221			T		1989	0126	JP	1987-503	3871	19870502	<
	FI	8705770			А		1987	1230	FΙ	1987-57	70	19871230	<
	ИО	8800010			А		1988	0210	NO	1988-10		19880104	<
	DK	8800006			А		1988	0217	DK	1988-6		19880104	<
PRAI	ΕP	1986-810	201		А		1986	0505	<				
	WO	1987-EP2	34		А		1987	0502	<				

- L10 ANSWER 26 OF 27 HCAPLUS COPYRIGHT 2008 ACS on STN
- II A rapid and simple method for purifying tRNA
- AB A column chromatog. method is described for purification of tRNA which uses an aldehyde-containing resin Enzacryl-polyacetal (EP) as the solid support. Escherichia coli And Bacillus subtilis tRNAs were first aminoacylated with lysine and then added to EP for coupling in the presence of NaCNBH3. The coupling yield was .apprx.\phi80%. The reaction mixture was then transferred to a column, thoroughly rinsed with pH 4.5 buffer, incubated in pH 8.0 buffer at 37° for 4 h, and the tRNALyseluted. PAGE confirmed the high purity of the separated E. coli and B. subtilis tRNALys.
- AN 1987:98765 HCAPLUS <<LOGINID::20080303>>
- DN 106:98765
- TI A rapid and simple method for purifying tRNA
- AU Wang, Qisong; Shang, Jinbao
- CS Shanghai Inst. Biochem., Acad. Sin., Shanghai, Peop. Rep. China
- SO Kexue Tongbao (Foreign Language Edition) (1986), 31(21), 1488-92 CODEN: KHTPBU; ISSN: 0454-0948
- DT Journal
- LA English

(FILE 'HOME' ENTERED AT 15:07:02 ON 03 MAR 2008)

FILE 'HCAPLUS' ENTERED AT 15:09:46 ON 03 MAR 2008

L1 629630 S RNA OR RIBONUCLEIC OR MRNA

L2 1911722 S KOSMOTROP? OR LITHIUM OR SODIUM OR CESIUM OR POTASSIUM OR RUB

L3 9171 S SOLID SUPPORT

L4 771205 S CELLULOSE OR NYLON OR POLYESTER OR POLYETHERSULFONE OR POLYOL

L5 53 S L1 AND L2 AND L3

L6 7 S L1 AND L2 AND L3 AND L4

FILE 'STNGUIDE' ENTERED AT 15:09:54 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 15:10:07 ON 03 MAR 2008

FILE 'STNGUIDE' ENTERED AT 15:10:07 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 15:32:00 ON 03 MAR 2008

FILE 'STNGUIDE' ENTERED AT 15:32:03 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 15:32:16 ON 03 MAR 2008

L7 4746 S (RNA OR MRNA OR RIBONUCLEIC) (3A) (PURIFICATION OR ISOLATION)

L8 5 S L7 AND L2 AND L3

L9 3 S L8 AND (PY<2002 OR AY<2002 OR PRY<2002)

FILE 'STNGUIDE' ENTERED AT 15:32:21 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 15:32:27 ON 03 MAR 2008

FILE 'STNGUIDE' ENTERED AT 15:32:28 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 16:17:40 ON 03 MAR 2008 L10 27 S L5 AND (PY<2001 OR AY<2001 OR PRY<2001)

FILE 'STNGUIDE' ENTERED AT 16:18:03 ON 03 MAR 2008

FILE 'HCAPLUS' ENTERED AT 16:20:36 ON 03 MAR 2008

FILE 'STNGUIDE' ENTERED AT 16:20:37 ON 03 MAR 2008

=> log hold

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.06 88.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION

CA SUBSCRIBER PRICE 0.00 -16.00

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 16:20:41 ON 03 MAR 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

### LOGINID: SSPTAEXO1623

## PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* \* \* SESSION RESUMED IN FILE 'STNGUIDE' AT 16:27:30 ON 03 MAR 2008 FILE 'STNGUIDE' ENTERED AT 16:27:30 ON 03 MAR 2008 COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY 0.06	SESSION 88.52
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY 0.00	SESSION -16.00
=> file hcaplus COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.18	88.64
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY 0.00	SESSION -16.00

FILE 'HCAPLUS' ENTERED AT 16:29:12 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s lysis

L11 34271 LYSIS

=> s 11 and 12 and 111

L12 171 L1 AND L2 AND L11

=> s 112 and (PY<2002 or AY<2002 or PRY<2002)

21938793 PY<2002 4200400 AY<2002 L13 106 L12 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> file stnguide

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 2.69 FULL ESTIMATED COST 91.33 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -16.00

FILE 'STNGUIDE' ENTERED AT 16:29:17 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> file hcaplus COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 0.06 91.39 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -16.00

FILE 'HCAPLUS' ENTERED AT 16:29:56 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12 and 17 and 111

L14 34 L2 AND L7 AND L11

=> s 113 and (PY<2002 or AY<2002 or PRY<2002)

21938793 PY<2002 4200400 AY<2002 3673784 PRY<2002

106 L13 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> file stnguide

L15

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 2.69 94.08 FULL ESTIMATED COST DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -16.00

FILE 'STNGUIDE' ENTERED AT 16:30:00 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

=> file hcaplus

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 0.06 94.14 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -16.00

FILE 'HCAPLUS' ENTERED AT 16:30:10 ON 03 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 3 Mar 2008 VOL 148 ISS 10 FILE LAST UPDATED: 2 Mar 2008 (20080302/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 114 and (PY<2002 or AY<2002 or PRY<2002)

21938793 PY<2002 4200400 AY<2002 3673784 PRY<2002 L16 20 L14 AND (PY<2002 OR AY<2002 OR PRY<2002)

=> file stnguide

COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

TOTAL

TOTAL

ENTRY

0.00

SESSION

-16.00

FILE 'STNGUIDE' ENTERED AT 16:30:14 ON 03 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 29, 2008 (20080229/UP).

CA SUBSCRIBER PRICE

=> d 116 1-20 ti abs bib YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

- L16 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions and apparatus for isolation of biological macromolecules
- The present invention relates generally to compns., methods and kits for AΒ use in clarification and viscosity reduction of biol. samples. More specifically, the invention relates to such compns., methods and kits that are useful in the isolation of biol. macromols. from cells (e.g., bacterial cells, animals cells, fungal cells, viruses, yeast cells or plant cells) via lysis and one or more addnl. isolation procedures, such as one or more filtration procedures. In particular, the invention relates to compns., methods and kits wherein biol. macromols. are isolated using a filter, where the pore size increases in the direction of sample flow. The compns., methods and kits of the invention are suitable for isolating a variety of forms of biol. macromols. from cells. The compns., methods and kits of the invention are particularly well-suited for rapid isolation of nucleic acid mols. from bacterial cells. HeLa cells were disrupted in quanidinium isothiocyanate lysis buffer and transferred to a filter (comprising a first regenerated cellulose layer with a pore size of  $0.2~\mu m$  and a second high d. polyethylene layer 1/8 in. thick (comprising two 1/16 in. thick frits) with a 20  $\mu m$  pore size) contained in a conical housing. This housing was then placed in a 2-mL conical centrifuge tube, and centrifuged for two minutes. An equal volume of 70 % ethanol was added to the flow-through and RNA was purified using an RNA-binding cartridge.
- AN 2002:637932 HCAPLUS <<LOGINID::20080303>>
- DN 137:181887
- ${
  m TI}$  Methods and compositions and apparatus for isolation of biological macromolecules
- IN Simms, Domenica; Trinh, Thuan
- PA Invitrogen Corporation, USA
- SO PCT Int. Appl., 42 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002306474
                         A1
                               20020828 AU 2002-306474
                                                                   20020213 <--
     US 2002127587
                         Α1
                                20020912
                                           US 2002-73260
                                                                   20020213 <--
PRAI US 2001-268027P
                        Ρ
                                20010213 <--
     WO 2002-US4185
                         W
                                20020213
RE.CNT 5
              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
L16
    Methods and kits for isolating nucleic acids from leukocytes by binding to
ΤI
     antibodies on a solid support
     The present invention relates to a method of isolating nucleic acid from a
AΒ
     blood sample. The method involves selectively isolating leukocytes from
     said sample by binding said leukocytes to a solid support containing a binding
     partner specific for the leukocyte, for example an antibody. The antibody
     can bind an antigen selected from one of more of the following: HLA-I,
     CD11a, CD18, CD45, CD46, CD50, CD82, CD162, CD5 and CD15 and a specific
     example shows a combination of CD45 and CD15. The said leukocytes are
     lysed in detergents to release nucleic acids which are subsequently bound
     to a second solid support which is neg. charged. Kits for isolating
     nucleic acid from samples form further embodiments of the invention.
ΑN
     2001:904506 HCAPLUS <<LOGINID::20080303>>
     136:15912
DN
ΤI
    Methods and kits for isolating nucleic acids from leukocytes by binding to
     antibodies on a solid support
     Bergholtz, Stine; Korsnes, Lars; Andreassen, Jack
IN
     Dynal Biotech Asa, Norway; Jones, Elizabeth Louise
PA
SO
     PCT Int. Appl., 51 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                       KIND
                                DATE
                                         APPLICATION NO. DATE
     PATENT NO.
                        ____
    WO 2001094572
                        A1 20011213
                                         WO 2001-GB2472 20010605 <--
РΤ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                20011213
     CA 2410888
                          Α1
                                         CA 2001-2410888
                                                                   20010605 <--
                                           EP 2001-934205
     EP 1290155
                          Α1
                                20030312
                                                                   20010605 <--
     EP 1290155
                                20060809
                         В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     AT 335815
                          Τ
                                20060915
                                            AT 2001-934205
                                                                   20010605 <--
     ES 2269399
                         Т3
                                20070401
                                            ES 2001-934205
                                                                   20010605 <--
     US 2003180754
                        A1 20030925
                                            US 2003-297301
                                                                   20030430 <--
                        A 20000605 <--
W 20010605 <--
PRAI GB 2000-13658
                        W
     WO 2001-GB2472
```

#### RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L16 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Extraction of total RNA from adipocytes
- RNA isolation from adipocytes presents with several AB tech. problems and yields unacceptable results when following standard protocols. Here, we will describe addnl. steps and modifications necessary for the use of different RNA isolation protocols in terms of RNA yield, RNA quality and preparation time. Using five times the recommended quantity of lysis buffer, incubating the lysate at 37°C, repeatedly passing the lysate through a cannula, and centrifugation to remove the lipid layer are essential addnl. steps when working with adipocytes. With these modifications, isolation of total RNA resulted in an average yield of 12-30  $\mu g$  total RNA from 2 + 106 cells. Preparation times were similar for all but the CsCl gradient method. The purest RNA was obtained by spin-column purification, whereas acid phenol-chloroform methods yielded the highest amts. of total RNA. CsCl gradient ultracentrifugation is suggested for situations where DNase I digestion is impractical.
- ΑN 2001:453980 HCAPLUS <<LOGINID::20080303>>
- DN 136:113352
- TIExtraction of total RNA from adipocytes
- Janke, J.; Engeli, S.; Gorzelniak, K.; Sharma, A. M. ΑU
- CS Franz-Volhard-Klinik, Universitatsklinikum Charite, Humboldt Universitat Berlin, Germany
- Hormone and Metabolic Research (2001), 33(4), 213-215 SO CODEN: HMMRA2; ISSN: 0018-5043
- PΒ Georg Thieme Verlag
- DT Journal
- LA English
- RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L16 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Low pH RNA isolation reagents and method
- AΒ The present invention describes an RNA isolation process which utilizes low pH reagents. In addition, the reagents are less hazardous and are more stable than those used in prior art methods. A cell lysis reagent includes: an amount of an anionic detergent such as a dodecyl sulfate salt or N-lauroyl sarcosine effective to lyse cell or protein coats sufficiently to release substantially undegraded RNA; a chelating agent such as EDTA or CDTA, water; and an amount of a buffer effective to provide a pH of less than about 4-6. In addition, the kit can include a protein-DNA pptn reagent comprising a sodium or potassium salt in an amount effective to precipitate DNA. This rapid method may be used to obtain purified RNA from a variety of biol. sources including human whole blood, plant and animal tissues, cultured cells, body fluids, yeast, and bacteria.
- 1999:686745 HCAPLUS <<LOGINID::20080303>> ΑN
- DN131:297336
- ΤI Low pH RNA isolation reagents and method
- Heath, Ellen M. ΙN
- PΑ Gentra Systems, Inc., USA
- U.S., 8 pp., Division of U.S. Ser. No. 600,626. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE PATENT NO.

PI US 5973137 A 19991026 US 1997-867243 19970602 <--PRAI US 1996-600626 A3 19960213 <---

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L16 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of functional RNA from periderm tissue of potato tubers and sweet potato storage roots
- AB A reliable and efficient protocol is given for the isolation of mRNA from the periderm of potato tubers and sweet potato storage roots. The method relies on a urea-based lysis buffer and lithium chloride to concentrate total RNA away from most of the cytoplasmic components and to prevent oxidation of phenolic complexes. To enhance the phys. separation of the RNA from other macromol. components, the RNA fraction was incubated in the presence of the cationic surfactant Catrimox-14. Poly(A) + mRNA was separated from total RNA and other contaminants by using Promega's MagneSphere technol. The mRNA was suitable for cDNA library construction and RNA fingerprinting.
- AN 1999:367870 HCAPLUS <<LOGINID::20080303>>
- DN 131:196636
- TI Isolation of functional RNA from periderm tissue of potato tubers and sweet potato storage roots
- AU Scott, David L., Jr.; Clark, Clarence W.; Deahl, Kenneth L.; Prakash, Channapatna S.
- CS Agriculture Research Service, Vegetable Laboratory, US Department of Agriculture, Beltsville, MD, 20705, USA
- SO Plant Molecular Biology Reporter (1998), 16(1), 3-8 CODEN: PMBRD4; ISSN: 0735-9640
- PB Kluwer Academic Publishers
- DT Journal
- LA English
- RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L16 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Biomolecular processor for isolation and purification of nucleic acids
- AB A process and apparatus are described for isolating and purifying nucleic acids and other target mols. directly from blood, plasma, urine, cell cultures and the like by totally automated means, without centrifugation, aspiration or vacuum. After mixing and heating a nucleic acid containing sample with lysis reagent in an environmentally isolated compartment, nucleic acids are absorbed onto a binding filter and eluted in a small volume using heated elution reagent. A preferred embodiment purifies nucleic acids and automatically detects target sequences from a sample of fresh blood. Another embodiment purifies target mols. from a multitude of samples held in microtiter plates. Test kits for each embodiment include disposable isolation and detection devices and associated reagents.
- AN 1998:672693 HCAPLUS <<LOGINID::20080303>>
- DN 129:272649
- TI Biomolecular processor for isolation and purification of nucleic acids
- IN Fields, Robert E.
- PA USA
- SO PCT Int. Appl., 38 pp.
  - CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	WO 9842874	A2	19981001	WO 1998-US6029	19980323 <		

```
WO 9842874
                                19981223
                          А3
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
             FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
             GA, GN, ML, MR, NE, SN, TD, TG
     AU 9867790
                          Α
                                19981020
                                            AU 1998-67790
                                                                     19980323 <--
     EP 972080
                          A2
                                20000119
                                            EP 1998-913175
                                                                    19980323 <--
     EP 972080
                          В1
                                20050323
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     AT 291637
                          Τ
                                20050415
                                            AT 1998-913175
                                                                    19980323 <--
     US 2003027203
                                20030206
                                            US 2002-243521
                          Α1
                                                                    20020912 <--
PRAI US 1997-41237P
                                19970324 <--
                          Ρ
                                          <---
     WO 1998-US6029
                          W
                                19980323
     US 1999-381603
                                19990922
                                          <---
                          В1
L16 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
ΤI
     Laboratory methods: rapid methods for isolation of total
     RNA from eukaryotic cell lines and leukocytes
AB
     Total RNA was isolated from human leukocytes (monocytes, granulocytes),
     various cell lines (COS-7, Mono-Mac-6, L-132, HaCaT, EA.hy926, HL-60), and
     fungal mycelium by a rapid two-step method. Cells were lysed with NaDodSO4 in a citric acid-containing buffer. This procedure was succeeded by
     salt precipitation to remove contaminating DNA and protein and a final alc.
precipitation
     of RNA. Isolated RNA was of high quality, with a reasonable yield and
     little or no protein or DNA contamination. The authors present here a
     fast method for preparing RNA particularly from cell lines, which limits the
     use of toxic compds.
ΑN
     1998:294423 HCAPLUS <<LOGINID::20080303>>
     129:36899
DN
ΤI
     Laboratory methods: rapid methods for isolation of total
     RNA from eukaryotic cell lines and leukocytes
ΑU
     Dreier, Jens; Hogger, Petra; Sorg, Clemens
CS
     Institute of Experimental Dermatology, University of Munster, Munster,
     D-48149, Germany
     DNA and Cell Biology (1998), 17(4), 321-323
SO
     CODEN: DCEBE8; ISSN: 1044-5498
PΒ
     Mary Ann Liebert, Inc.
DT
     Journal
     English
LA
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L16 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
     Simultaneous purification of RNA and DNA from liver
ΤI
     using sodium acetate precipitation
AΒ
     Several methods for the isolation of RNA use
     quanidinium solns. for cell lysis to provide optimal protection
     from RNases. It is sometimes necessary, though, to harvest both DNA and
     RNA from the same tissue. Separation of RNA and DNA from guanidinium
     isothiocyanate lysates has been achieved by cesium chloride
     ultracentrifugation or by acidic phenol extraction followed by recovery of DNA
     from the phenol phase. Presented here is an alternative method using
     sodium acetate precipitation Selective precipitation of RNA using sodium
```

acetate or lithium chloride has been previously used for

RNA isolation, but the authors demonstrate that

```
high-quality DNA can be obtained simultaneously.
    1998:173861 HCAPLUS <<LOGINID::20080303>>
ΑN
DN
    128:290760
    Simultaneous purification of RNA and DNA from liver
ΤI
    using sodium acetate precipitation
    Evans, Judith K.; Troilo, Philip; Ledwith, Brian J.
ΑU
CS
    Merck Res. Lab., West Point, PA, USA
    BioTechniques (1998), 24(3), 416-418
SO
    CODEN: BTNQDO; ISSN: 0736-6205
РΒ
    Eaton Publishing Co.
    Journal
DТ
    English
LA
RE.CNT 8
             THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L16 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
    Method and device for the simultaneous isolation of genomic DNA and
ΤI
    high-purity total RNA
AΒ
    The invention concerns a method and device for the rapid, simultaneous
    isolation of genomic DNA (DNA) and cellular total RNA (RNA), free of
    genomic DNA from various starting materials. The fields of application
    are mol. biol., biochem., gene technol. (in particular gene therapy),
    medicine, biomedical diagnosis, veterinary medicine, food anal. and all
    related fields. The method proposed is characterized in that materials
    containing DNA and RNA are lysed in a special buffer, the lysate incubated
    with a mineral carrier, the carrier with the DNA bound to it separated off and
    washed with buffer solution, and the DNA subsequently separated from the
carrier
    with a buffer of lower salt concentration. The lysate left after separating
off the
    DNA bound to the carrier is mixed with phenol, chloroform and
    sodium acetate in defined proportions, the phases allowed to sep.,
    and the total RNA precipitated from the aqueous phase by adding isopropanol.
    Lysis is carried out using buffers containing chaotropic salts with a
    high ionic strength. Lysis of the material and bonding of the
    genomic DNA to the carrier are both carried out in the same buffer. Both
    the lysis of the starting material and all necessary washing
    steps are carried out in an apparatus which makes it possible to process 12
    samples in parallel.
ΑN
    1997:533658 HCAPLUS <<LOGINID::20080303>>
DN
    127:187834
ΤI
    Method and device for the simultaneous isolation of genomic DNA and
    high-purity total RNA
    Hillebrand, Timo; Bendzko, Peter
IN
    Invitek G.m.b.H., Germany; Hillebrand, Timo; Bendzko, Peter
PA
SO
    PCT Int. Appl., 24 pp.
    CODEN: PIXXD2
DT
    Patent
T.A
    German
FAN.CNT 1
    PATENT NO.
                       KIND
                               DATE
                                         APPLICATION NO.
                                                                  DATE
     _____
                        ____
                               _____
                                           ______
                                                                  _____
                               19970807 WO 1996-DE1291
PΙ
    WO 9728171
                        A1
                                                                  19960716 <--
        W: CA, JP, RU, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
```

A1 19970807 CA 1996-2243829

R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, FI

AT 250073 T 20031015 AT 1996-923854 19960716 <-- US 6043354 A 20000328 US 1998-101935 19980721 <--

EP 1996-923854

A1 19981202 B1 20030917 19960716 <--

19960716 <--

CA 2243829

EP 880535

EP 880535

US 6110363 A 20000829 US 1999-288380 19990408 <-PRAI DE 1996-29601618 U 19960131 <-WO 1996-DE1291 W 19960716 <--

- L16 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions for isolating nucleic acids
- AB Compns. and methods are disclosed for isolating nucleic acids from biol. tissues and cells (including tumor cells) and for tissue/cell solubilization for other mol. biol. uses, wherein the compns. comprise, in part, novel combinations of chaotropic agents and aromatic alcs. which act synergistically to effect better tissue/protein solubilization. The inventive compns. further include aprotic solvents for deactivation of RNases and denaturization of proteins, as well as detergents for enhancing cell lysis and nucleoprotein dissociation. The inventive methods also comprise the use of a centrifuge, a solid-support matrix, and a microporous membrane for final isolation of the precipitated nucleic acids, resulting in high yield and purity of the precipitated nucleic acid.
- AN 1997:400479 HCAPLUS <<LOGINID::20080303>>
- DN 127:78238
- TI Methods and compositions for isolating nucleic acids
- IN Wiggins, James C.
- PA USA
- SO U.S., 15 pp. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 1

	PATENT NO.	T NO. KIND DATE API		APPLICATION NO.	DATE		
ΡI	US 5637687	A	19970610	US 1993-115184	19930831 <		
PRAI	US 1993-115184		19930831 <	(			

- L16 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI}$  Method for the simultaneous isolation of genomic DNA and highly purified total RNA
- AB The invention concerns the rapid simultaneous isolation of genomic DNA and cellular total RNA, free from genomic DNA, from different starting materials (e.g., <105 cells or <1 mg tissue sample). Applications of the method are in mol. biol., biochem., genetic techniques, medicine, veterinary medicine, and related areas. In the method, the DNA- and RNA-containing materials are lysed with a special buffer, the lysate for isolation of the genomic DNA is incubated with a nonporous highly-dispersed SiO2 support, the support with the bound DNA is separated by centrifugation and washed with buffer solution, and then the DNA is released from the support with a low-salt-concentration buffer. The lysate, after separation
- of the support-fixed DNA, is mixed with specified amts. of PhOH, CHCl3, and NaOAc, and after phase separation, the cellular total RNA is precipitated out of

the aqueous phase by addition of iso-PrOH. Lysis is done with buffers containing chaotropic salts of higher ionic strength. Lysis of the material and binding of genomic DNA to the support are done with the same buffer. An example is given of the isolation of DNA and total RNA from a eukaryotic monolayer cell culture with about 5 + 106 cells.

- AN 1996:563526 HCAPLUS <<LOGINID::20080303>>
- DN 125:190022
- ${
  m TI}$  Method for the simultaneous isolation of genomic DNA and highly purified total RNA
- IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
- PA Invitek Gmbh, Germany
- SO Ger. Offen., 4 pp.

CODEN: GWXXBX

DT Patent

LA German FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
ΡI	DE 19506887	A1	19960822	DE 1995-19506887	19950217 <			
	DE 19506887	C2	19991014					
PRAI	DE 1995-19506887		19950217	<				

- L16 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Universal process for isolating and purifying nucleic acids from extremely small amounts of various highly contaminated starting materials
- AB A universal process is disclosed for extracting and purifying nucleic acids from extremely small amts. of various highly contaminated biol. and other starting materials. The invention has applications in forensic medicine, medical diagnosis, mol. biol., biochem., genetic technol. and all related fields. The process is characterized in that nucleic acid-containing materials are lysed, the lysate is incubated with a nonporous, non-structured, highly disperse, homogeneous and chemical pure SiO2 substrate, the substrate is isolated with the bound nucleic acids and washed with a buffer solution, then the nucleic acids are released from the substrate with a buffer with a lower salt concentration Lysis of the material and nucleic acid immobilization are preferably carried out in a reaction vessel. The substrate particles have a size of 7-40 nm, preferably 40 nm, and a sp. surface of 50-300 g/m2, preferably 50 g/m2.
- AN 1996:89343 HCAPLUS <<LOGINID::20080303>>
- DN 124:111769
- TI Universal process for isolating and purifying nucleic acids from extremely small amounts of various highly contaminated starting materials
- IN Hillebrand, Timo; Bendzko, Peter; Peters, Lars-Erik
- PA Invitek GmbH, Germany; Hillebrand Timo
- SO PCT Int. Appl., 27 pp.
  - CODEN: PIXXD2
- DT Patent
- LA German
- FAN.CNT 3

	PATENT NO.			KIND DATE				APPLICATION NO.					DATE					
PI	WO	9534569 W: JF			A1	_	1995	1221		WO 1	1995-	DE78	7		1	9950	614	<
		RW: AT			DE,	DK	, ES,	FR,	GB,	GR,	, IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE	
	DE	4422040	)		A1		1995	1221		DE I	1994-	4422	040		1	9940	614	<
	DE	4422044	ļ.		A1		1995	1221		DE 3	1994-	4422	044		1	9940	614	<
	DE	4447015	)		A1		1996	0704		DE 3	1994-	4447	015		1	9941	230	<
	DE	4447015	<u> </u>		C2		1997	0911										
		765335			A1		1997	0402		EP 3	1995-	9217	02		1	9950	614	<
	ΕP	765335			В1		1999	0901										
		R: AI																
	_	1050124					1998			JP 1	1996-	5014	76		1	9950	614	<
	-	3761573			В2		2006											
		6037465			А						1996-	7800	91		1	9961	216	<
PRAI		1994-44			А		1994											
		1994-44			А		1994											
		1994-44					1994											
	WO	1995-DE	787		W		1995	0614	<-									

- L16 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of biologically functional RNA during programmed death of a colonial ascidian
- AB The blastogenic (asexual) cycle of the colonial ascidian Botryllus

schlosseri (Tunicata, Ascidiaceae) concludes in a cyclical phase of programmed cell and zooid death called takeover, in which all asexually derived adults die synchronously by apoptosis. The characterization of developmentally regulated genes whose expression patterns are selectively modulated during this process could pave the way to understand how this model organism dies. However, isolation of biol. functional RNA in this and other colonial ascidians with conventional phenol/chloroform-based procedures is hampered by extensive contamination of RNA prepns. by pigments. Upon cell lysis, pigments that normally reside within specialized cells in the mantle wall of the adult are released and tightly associate with nucleic acids. Here, the authors report on the usefulness of a single-step RNA isolation method in which acid guanidinium isothiocyanate is used as an extraction medium, followed by preparative cesium chloride ultracentrifugation. This procedure successfully isolated biol. active, high-purity total RNA (OD260/OD280 = 1.9-2.1) from Botryllus colonies during takeover, as well as other species of colonial ascidians (Diplosoma macdonaldii, Botrylloides diegense) irresp. of pigmentation. Northern blot anal. performed with a 32P-labeled tunicate actin probe detected 2 polyadenylated transcripts of 1.5 and 1.7 kilobases in length from both growth phase and takeover colonies. Two-dimensional protein gel assays from in vitro translated mRNA prepns. further revealed that specific transcripts were upregulated during takeover, while others were repressed or down-regulated. Growth phase and takeover-specific cDNA libraries were constructed from pooled poly(A) + RNA with a complexity of 107 and 1.2+107 recombinants resp. per 100 ng of cDNA before amplification. The procedure described herein renders feasible the cloning of developmentally regulated genes in this organism. In addition, the findings raise the possibility that zooid death in Botryllus involves modulated gene expression.

- AN 1995:453173 HCAPLUS <<LOGINID::20080303>>
- DN 122:210201
- TI Isolation of biologically functional RNA during programmed death of a colonial ascidian
- AU Chang, Wen-Teh; Lauzon, Robert J.
- CS Department of Microbiology, Immunology and Molecular Genetics, Albany Medical College, Albany, NY, 12208, USA
- SO Biological Bulletin (Woods Hole, MA, United States) (1995), 188(1), 23-31 CODEN: BIBUBX; ISSN: 0006-3185
- DT Journal
- LA English
- L16 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of RNA using quaternary amine surfactants
- A novel method for isolating RNA from biol. samples, most particularly AΒ blood, using quaternary amine surfactants . The RNA is isolated quickly and in sufficient quantity and quality for use in methods including reverse transcriptase and polymerase chain reaction. The quaternary ammonium salts (R1)(R2)(R3)(R4)N+.X- (R1, R2, R3, R4 each independently C1-20 alkyl, C6-26 optionally substituted aryl; X- = preferably phosphate, sulfate, formate, acetate, propionate, oxalate, malonate, succinate, citrate) lyse cells efficiently and also precipitate RNA directly from the lysate. The detergent is then extracted from the precipitate by washing with a concentrated LiCl solution and the RNA then redissolved using water or aqueous formamide. Tetradecyltrimethylammonium oxalate was prepared from tetradecyltrimethylammonium bromide by conversion to the hydroxide and neutralization with oxalate. A series of analogs were also prepared and their performance in the lysis of whole blood and the precipitation of RNA were studied. Optimization expts. and the use of the quaternary ammonium salts in a number of applications of isolated RNA are described.

```
AN 1994:648039 HCAPLUS <<LOGINID::20080303>>
```

- PA University of Iowa Research Foundation, USA
- SO PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

L MIA .	CNI Z				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 9418156	A1	19940818	WO 1994-US680	19940112 <
	W: AU, CA, JP				
	RW: AT, BE, CH,	DE, DK	, ES, FR, G	B, GR, IE, IT, LU, MC,	NL, PT, SE
	US 5300635	A	19940405	US 1993-13419	19930201 <
	AU 9462305	A	19940829	AU 1994-62305	19940112 <
	JP 08506340	T	19960709	JP 1994-518065	19940112 <
	JP 3615545	B2	20050202		
PRAI	US 1993-13419	A	19930201	<	
	US 1993-113727	A	19930827	<	
	WO 1994-US680	W	19940112	<	
OS	MARPAT 121:248039				

- L16 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of DNA and RNA from Streptococcus sobrinus OMZ176 using CsTFA gradients
- AB A simple procedure for isolation of high-mol.-weight genomic DNA, and RNA, from Streptococcus sobrinus OMZ176 is described. Cell cultures were grown aerobically for 10 h. Spheroplast formation and lysis was achieved by mutanolysin/lysozyme-dependent digestion of the cell wall, followed by N-lauroylsarcosinate-mediated lysis. Nucleic acids were isolated directly from cell-lysates using cesium -trifluoroacetate (CsTFA) d.-gradient centrifugation. Three different centrifugation regimes were tested: self-generated d. gradients in a fixed angle rotor; self-generated d.-gradients in a swinging-bucket rotor; and pre-formed d.-gradients in a swinging-bucket rotor. Genomic DNA isolated by the CsTFA-procedure had higher purity as compared to genomic DNA isolated in a conventional CsCl gradient. Isolated DNA was of a quality suitable for applications in mol. biol.
- AN 1994:101033 HCAPLUS <<LOGINID::20080303>>
- DN 120:101033
- TI Isolation of DNA and RNA from Streptococcus sobrinus OMZ176 using CsTFA gradients
- AU Forbord, Bjoern; Osmundsen, Harald
- CS Dent. Fac., Univ. Oslo, Oslo, N-0316, Norway
- SO International Journal of Biochemistry (1993), 25(12), 1975-80 CODEN: IJBOBV; ISSN: 0020-711X
- DT Journal
- LA English
- L16 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI RNA isolation from cartilage using density gradient centrifugation in cesium trifluoroacetate: an RNA preparation technique effective in the presence of high proteoglycan content
- AB An efficient method for the isolation of RNA from cartilage is described. The difficulties in obtaining RNA from cartilage, a tissue of low cell d. and high proteoglycan content, were overcome by making several modifications to the guanidine thiocyanate/cesium chloride method of RNA extraction Cartilage tissue is frozen, crushed, and homogenized in a 4M guanidine thiocyanate lysis buffer. The RNA

DN 121:248039

TI Isolation of RNA using quaternary amine surfactants

IN Macfarlane, Donald E.

is then pelleted by ultracentrifugation through a cesium trifluoroacetate d. gradient. The use of cesium trifluoroacetate, rather than cesium chloride, for d. gradient centrifugation improves both the yield and purity of total RNA isolated from cartilage. The ultracentrifugation has been adapted to the Beckman TL100 tabletop centrifuge and is complete in 3 h. This fast, simple method produces high quality RNA, suitable for use in RNase protection assays, polymerase chain reaction anal., and Northern anal. This purification procedure may be applicable to other sources, from which RNA isolation is complicated by the presence of abundant cell wall or matrix components.

- AN 1992:422718 HCAPLUS <<LOGINID::20080303>>
- DN 117:22718
- TI RNA isolation from cartilage using density gradient centrifugation in cesium trifluoroacetate: an RNA preparation technique effective in the presence of high proteoglycan content
- AU Smale, Georgeann; Sasse, Joachim
- CS Shriners Hosp. Crippled Child., Tampa, FL, USA
- SO Analytical Biochemistry (1992), 203(2), 352-6 CODEN: ANBCA2; ISSN: 0003-2697
- DT Journal
- LA English
- L16 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Isolation of high-molecular-weight DNA and double-stranded RNAs from fungi
- AB An efficient method for the extraction of DNA and RNA from fungi is described. Urediosporelings and sporidia of 2 basidiomycete species and mycelia from several species of Ascomycetes and Oomycetes were homogenized in a lysis buffer containing SDS followed by cetyltrimethylammonium bromide extraction of carbohydrates in 1.4M NaCl, leaving nucleic acids in the supernatant. After chloroform-isoamyl alc. extraction of proteins, nucleic acids were precipitated with ethanol. Total nucleic acids prepared in this way contained nuclear, ribosomal, and mitochondrial DNA as well as double-stranded and single-stranded RNA. DNA was eluted from agarose gels and digested with endonucleases, labeled by nick translation, and used for hybridization without nonspecific background signal. A method is also described for RNase digestion of single-stranded and double-stranded RNA in agarose gels.
- AN 1991:404559 HCAPLUS <<LOGINID::20080303>>
- DN 115:4559
- TI Isolation of high-molecular-weight DNA and double-stranded RNAs from fungi
- AU Kim, W. K.; Mauthe, W.; Hausner, G.; Klassen, G. R.
- CS Agric. Canada Res. Stn., Winnipeg, MB, R3T 2M9, Can.
- SO Canadian Journal of Botany (1990), 68(9), 1898-902 CODEN: CJBOAW; ISSN: 0008-4026
- DT Journal
- LA English
- L16 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Determination of HER-2/neu amplification and expression in tumor tissue and cultured cells using a simple, phenol free method for nucleic acid isolation
- AB A rapid, simple and non-toxic procedure for the simultaneous isolation of DNA and RNA from tumor tissue and cells grown in vitro is described. Guanidinium isothiocyanate was used for homogenization of tumor tissue and for cell lysis. Separation of proteins, DNA and RNA was carried out by isopycnic centrifugation in cesium trifluoroacetate. DNA was further purified by salting out residual protein. Nucleic acids prepared by this method from 47 primary human carcinomas and 17 human cell lines were analyzed for amplification and expression of the HER-2/neu proto-oncogene. 2- To 10-fold

amplification of HER-2/neu was noted in 7/22 mammary carcinomas (32%) and in 4.14 ovarian carcinomas (28%). No amplification of the proto-oncogene was found in 4 laryngeal carcinomas, 1 pharyngeal carcinoma, 2 retrolingual carcinomas, 3 gastric carcinomas and 1 kidney carcinoma. HER-2/neu overexpression was observed in 6/22 of mammary carcinomas (27%) and 7/14 of ovarian carcinomas (50%). No overexpression was found in all other carcinomas studied. Concordance between amplification and overexpression was noted in 3 mammary and 4 ovarian carcinomas, resp. 3 Mammary and 3 ovarian carcinomas showed overexpression without amplification. 5 Human mammary carcinoma cell lines showed both amplification and overexpression of HER-2/neu. In 2 mammary carcinoma cell lines (MDA MB-453 and ZR 75-1) overexpression was noted without amplification of the proto-oncogene. These data suggest that mechanisms other than gene amplification may also lead to overexpression of the HER-2/neu protooncogene in cancer cells.

- AN 1991:1551 HCAPLUS <<LOGINID::20080303>>
- DN 114:1551
- TI Determination of HER-2/neu amplification and expression in tumor tissue and cultured cells using a simple, phenol free method for nucleic acid isolation
- AU Kury, Fritz D.; Schneeberger, Christian; Sliutz, Gerhard; Kubista, Ernst; Salzer, Heinrich; Medl, Michael; Leodolter, Sepp; Swoboda, Herwig; Zeillinger, Robert; Spona, Juergen
- CS Ludwig Boltzmann Inst. Prenatal Exp. Genome Anal., Univ. Vienna, Vienna, A-1090, Austria
- SO Oncogene (1990), 5(9), 1403-8 CODEN: ONCNES; ISSN: 0950-9232
- DT Journal
- LA English
- L16 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI A method for isolation of RNA from Pneumocystis carinii
- AB Total RNA from P. carinii obtained directly from rat lung and from short-term culture on A549 cells was evaluated for size and purity. An isolation procedure using guanidine isothiocyanate and LiCl was preferable to a hot phenol method. Host cells were eliminated by hypotonic lysis and a series of microfiltrations. P. carinii were pretreated with Zymolyase for increased susceptibility to chaotropic agents. The major ribosomal species of P. carinii RNA migrated similarly to Saccharomyces cerevisiae rRNA. The 28 S-like species migrated well ahead of rat and A549 cell rRNA and well behind the prokaryotic large rRNA species.
- AN 1989:474262 HCAPLUS <<LOGINID::20080303>>
- DN 111:74262
- TI A method for isolation of RNA from Pneumocystis carinii
- AU Cushion, Melanie T.; Blase, Maria Airo; Walzer, Peter D.
- CS Veteran's Adm. Med. Cent., Cincinnati, OH, 45220, USA
- SO Journal of Protozoology (1989), 36(1), 12S-14S CODEN: JPROAR; ISSN: 0022-3921
- DT Journal
- LA English
- L16 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Simple procedure for isolation of DNA, RNA, and protein fractions from cultured animal cells
- AB A simple nonenzymic procedure was described for the separation of DNA, RNA, and proteins of cultured animal cells. The method used the cynaotropic salt, NaSCN, in order to lyse the HeLa cells and to produce complete mol. dissociation of the nuclear protein complexes. Sedimentation of the lysates

into CsCl2-Cs2SO4 d. gradients effected a rapid and complete separation of DNA and RNA from protein and low-mol.-weight components of the lysate. DNA isolated by this procedure was high-mol. weight and double-stranded.

AN 1975:167144 HCAPLUS <<LOGINID::20080303>>

DN 82:167144

OREF 82:26705a,26708a

TI Simple procedure for isolation of DNA, RNA, and protein fractions from cultured animal cells

AU Shaw, Joseph L.; Blanco, Jeronimo; Mueller, Gerald C.

CS McArdle Lab. Cancer Res., Univ. Wisconsin, Madison, WI, USA

SO Analytical Biochemistry (1975), 65(1), 125-31

CODEN: ANBCA2; ISSN: 0003-2697

DT Journal

LA English